

## REMARKS

This application has been reviewed in light of the Office Action mailed on September 8, 2004. Claims 1-38 are pending in the application with Claims 1, 11, 21 and 30 being in independent form. By the present amendment, Claim 1 has been amended to incorporate the limitations of Claim 6, Claim 11 has been amended to incorporate the limitations of Claim 16, Claim 21 has been amended to incorporate the limitations of Claim 25 and Claim 34 has been amended to incorporate the limitations of Claim 34. Claims 6, 16, 25 and 34 have been deleted. No new matter or issues are believed to be introduced by the amendments.

(1) In the Office Action, Claims 1-38 were rejected under 35 U.S.C. §103(a) over the article entitled "Color SuperHistograms for Video Representation", written by Dimitrova et al in view of U.S. Patent No. 5,805,733 issued to Wang et al. on September 8, 1998 ("Wang et al.").

Independent Claims 1, 11, 21 and 30 have been amended herein to better define Applicant's invention and to patentably distinguish Applicant's invention over the cited references. Claims 1, 11, 21 and 30 now recites limitations and/or features which are not disclosed or suggested by the cited references alone and in combination. Claim 1 has been amended to incorporate the limitations of dependent Claim 6, which is believed to be patentably distinguishable over the cited references, alone and in combination. Similar recitations have been added to Claims 11, 21 and 30 and the same arguments presented below with respect to Claim 1 apply to these claims as well.

In particular, Claim 1 now recites:

1. For use in a system (100) capable of creating visual summaries of video material, an apparatus (130, 200) for creating a compact visual summary of video material, said apparatus (130, 200) comprising:

a visual summary controller (130, 200) capable of receiving keyframes of said video material;

wherein said visual summary controller (130, 200) is capable of extracting frame signatures from said keyframes, and capable of using said frame signatures to create superhistograms from said keyframes, and capable of using said frame signatures and said superhistograms to select **representative** keyframe images **for each superhistogram** to create a compact visual summary of said video material ,

**wherein said representative images include at least one of (1) the first image in each family histogram, (2) the most meaningful image in each superhistogram, (3) a randomly chosen image, and (4) an image that is closest to the cluster center.**

The cited reference, Wang et al., does not disclose or suggest the above-underlined limitations which have been added to Claim 1.

Wang et al. teaches in the abstract, a method and system for summarizing scenes in a video sequence by detecting scene changes, and then comparing scenes in a moving window to determine their similarity. Similar scenes are consolidated and represented by a representative frame, a number of which are displayed to a user. Wang et al. teaches throughout the specification and claims: *for each set of related scenes, a representative frame is taken, either as the medial frame from the entire time duration of the related scenes or as the first frame of the medial scene in the set* ( See Wang et al. in the abstract, Claims 11 and 19 and Col. 3, lns. 57-62).

Wang et al. does not teach or disclose the limitations of Claims 6, 16, 25 and 34 which have been incorporated into claims 1, 11, 21 and 30, respectively. In particular, Wang et al. does not teach or disclose that said representative images include at least one of (1) the first image in each family histogram, (2) the most meaningful image in each superhistogram, (3) a randomly chosen image, and (4) an image that is closest to the cluster center, as recited in independent claims 1, 11, 21 and 30, as amended.

In the Office Action, the Examiner rejects Claims 6, 16, 25 and 34 alleging that Dimitrova et al. teaches the selection of the most meaningful image for each superhistogram (the top n largest families) as the representative image at page 316, section 2.4. Applicant's respectfully disagree with the Examiner's assertion. It is respectfully submitted that Dimitrova et al. does not teach "the selection of the most meaningful image for each superhistogram". Rather, the reference in Dimitrova to "the top n largest families" refers instead to a method of choosing "the top n largest families" of computed family histograms, where a family histogram is defined in section 2.3 of Dimitrova et al at page 316. A definition of what is meant by "most meaningful frame" can be found in the Specification at page 16, lns. 22-23, wherein it is stated: The term "meaningful image" may refer to a frame with a person's face, an important text, etc. Visual summary application 260 then creates a compact visual summary using the selected keyframe images.

It is further submitted that Wang et al. also does not teach or disclose that a representative frame comprises one of: a first image in each family histogram, a randomly chosen image, and an image that is closest to the cluster center. As stated above, Wang et al. explicitly teaches in the abstract, in Claims 11 and 19 and at Col. 3, lns. 57-62 that *a representative frame is taken,*

*either as the medial frame from the entire time duration of the related scenes or as the first frame of the medial scene in the set.*

Applicant respectfully submits that Claims 1, 11, 21 and 30 as amended hereinabove, is not anticipated by the references, alone and in combination for at least the reasons provided above. Accordingly, applicant respectfully requests that the rejection under 35 U.S.C. §103(a) with respect to Claims 1, 11, 21 and 30 and allowance thereof is respectfully requested.

Additionally, Claims 2-5, 7-10, 12-15, 17-20, 22-24, 26-29, 31-33 and 35-38 depend from independent Claims 1, 11, 21 and 30, respectively and therefore contain the limitations of Claims 1, 11, 21 and 30. Hence, for at least the same reasons given for Claims 1, 11, 21 and 30, Claims 2-5, 7-10, 12-15, 17-20, 22-24, 26-29, 31-33 and 35-38 are believed to be allowable over the cited reference. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) with respect to Claims 2-5, 7-10, 12-15, 17-20, 22-24, 26-29, 31-33 and 35-38 and allowance thereof is respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-5, 7-10, 11-15, 17-20, 21-24, 26-29, 30-33 and 35-38 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Dicron Halajian, Esq., Intellectual Property Counsel, Philips Electronics North America Corp., at 914-333-9607.

Respectfully submitted,



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